HYDROLOGY

J14/D11
1 PLAN

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CITY OF ALBUQUERQUE

Q_1 Positive Discharge to Storm Sewer Sharp Edge Orific.

$Q = Ca\,(2gH)^{\frac{1}{2}}$ $a = \frac{Q}{C\,(2gH)^{\frac{1}{2}}}$ =

C = .6 Table 4-6 H = 4.0" Section 1/1

a = 2¼" Dia.

Q_1 Required

Q_1 = 6065 X 1.62/12/3600 X .5 = .25 CFS

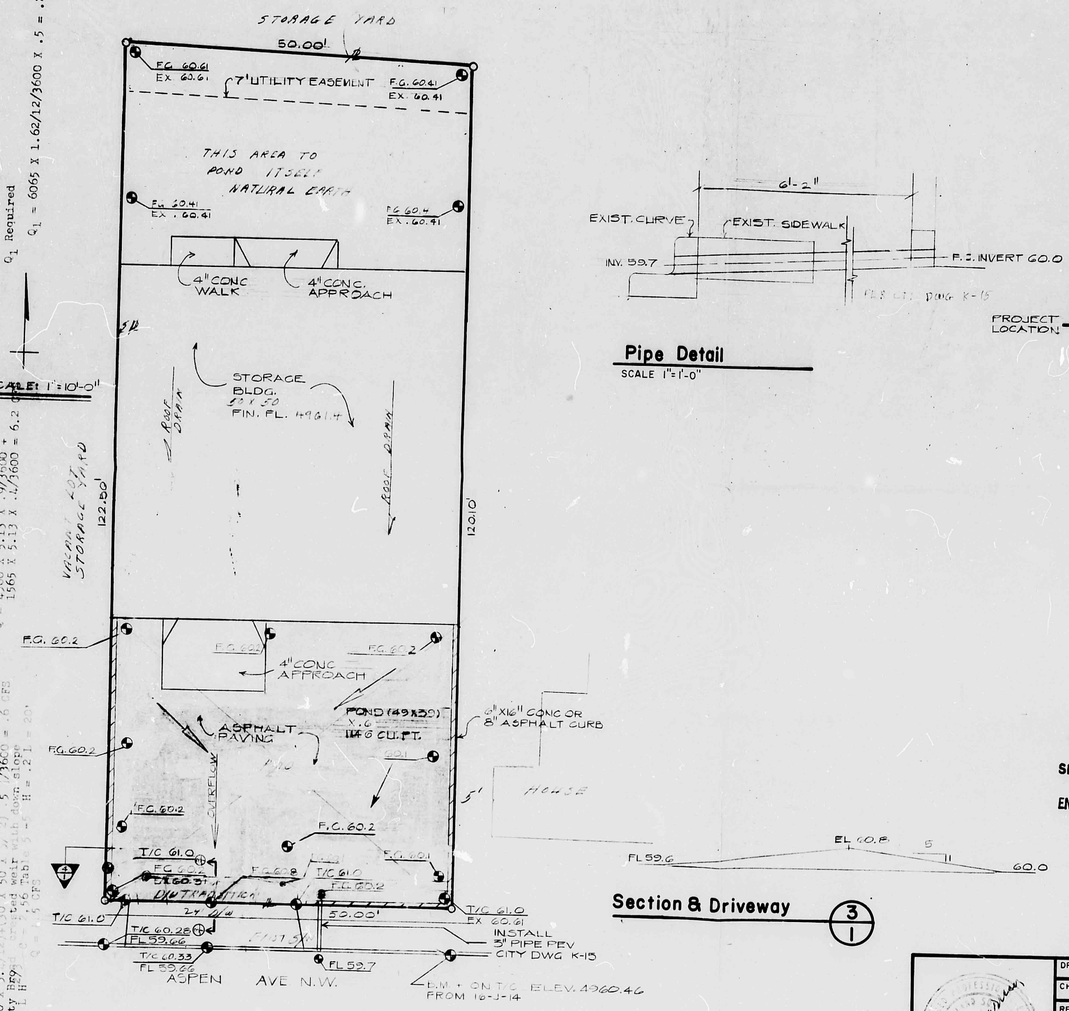
DRAINAGE CALCULATIONS: Ref. "Handbook of Hydraulics", King & Brater

Ponding Required.
Lot size 6065 Sq. Ft. X .18 = 1090 Cu Ft.
Ponding: 39' X 49' - 360 Sq. Ft. X .8 = 1140 Cu ft.
Over flow design Q.

Q.10 Undeveloped
Q = CiA = 6065 X 5.13 X .4/3600 = 3.45CFS

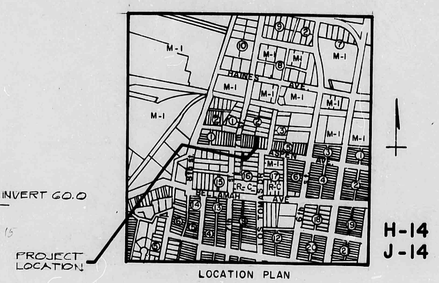
Q.10 Developed
Q = 1500 X 5.13 X .9/3600 + 6.2
1565 X 5.13 X .1/3600 = 6.2

.9(90 X 50 X 5. /12)(60 X 50 A W 12) 5 1/3600 = .6 CFS
Capacity Rev. Q = Cutted weir with down slope
Q = 3.1 H^3/2 .56 Tab 5-4 H = .21 = 20"
Q = 3.1 (.21)^3/2 = .5 CFS



NO OFFSITE FLOW SEE ATTACED ORTHO PHOTO TOPO

Pipe Detail
SCALE 1"=1'-0"


M-1
MARNE
AVE.
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